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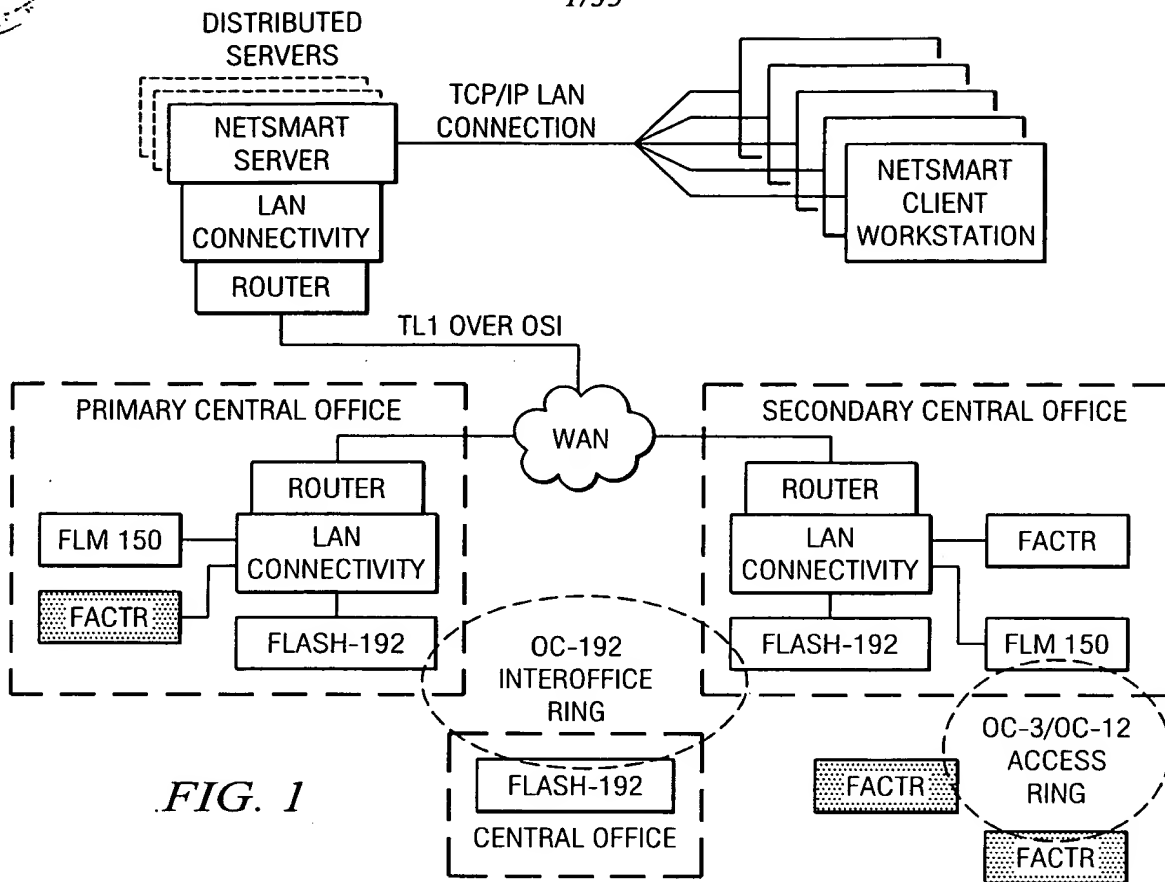


FIG. 1

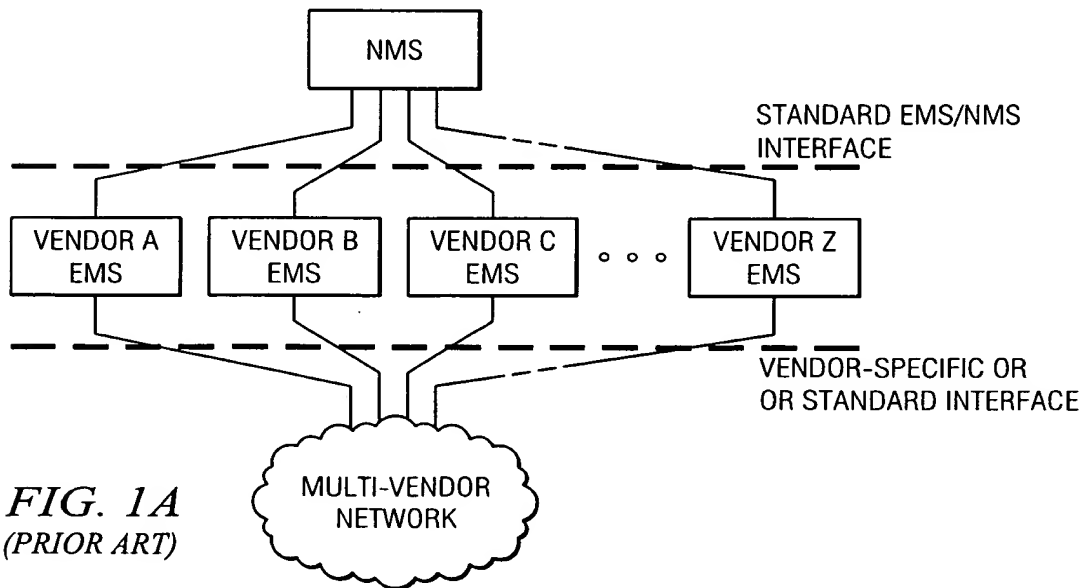


FIG. 1A  
(PRIOR ART)

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**FIG. 1B**  
(PRIOR ART)

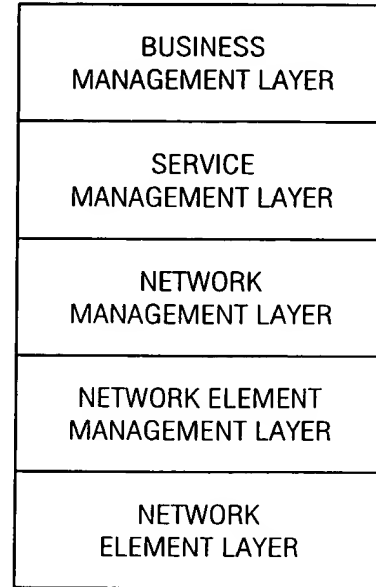
BML- MANAGE THE OVERALL BUSINESS, e.g., ACHIEVING RETURN ON INVESTMENT, MARKET SHARE, EMPLOYEE SATISFACTION, COMMUNITY AND GOVERNMENT GOALS.

SML- MANAGE THE SERVICES OFFERED TO CUSTOMERS, e.g., MEETING CUSTOMER SERVICE LEVELS, SERVICE QUALITY, COST AND TIME-TO-MARKET OBJECTIVES.

NML- MANAGE THE NETWORK AND SYSTEMS THAT DELIVER THOSE SERVICES, e.g., CAPACITY, DIVERSITY, AND CONGESTION.

EML- MANAGE THE ELEMENTS COMPRISING THE NETWORKS AND SYSTEMS

NEL- SWITCHES, TRANSMISSION, DISTRIBUTION SYSTEMS, ETC...



**FIG. 2**

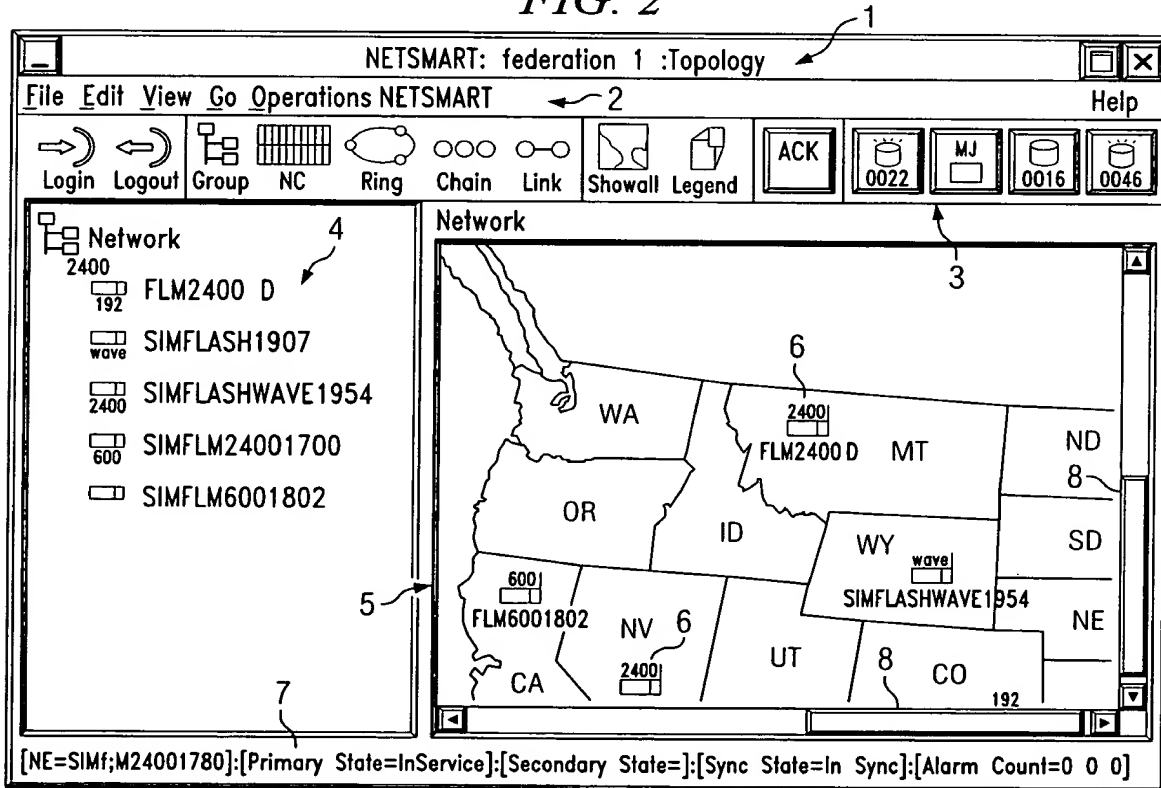


FIG. 3

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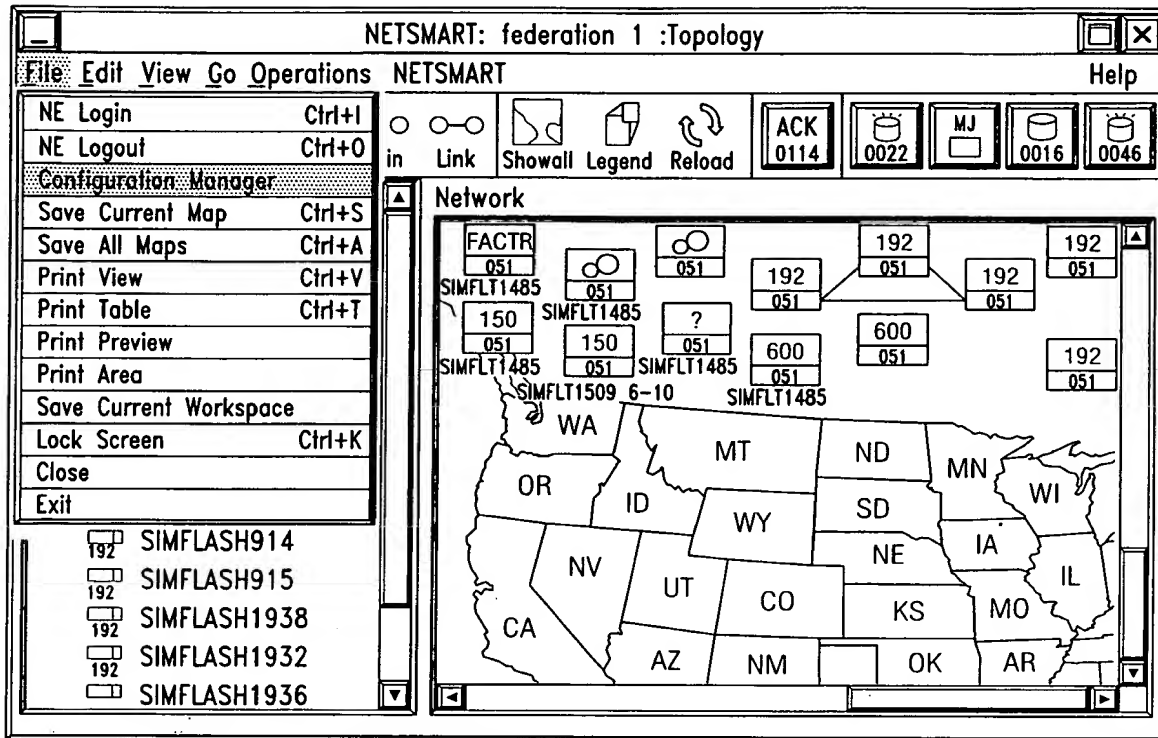


FIG. 4

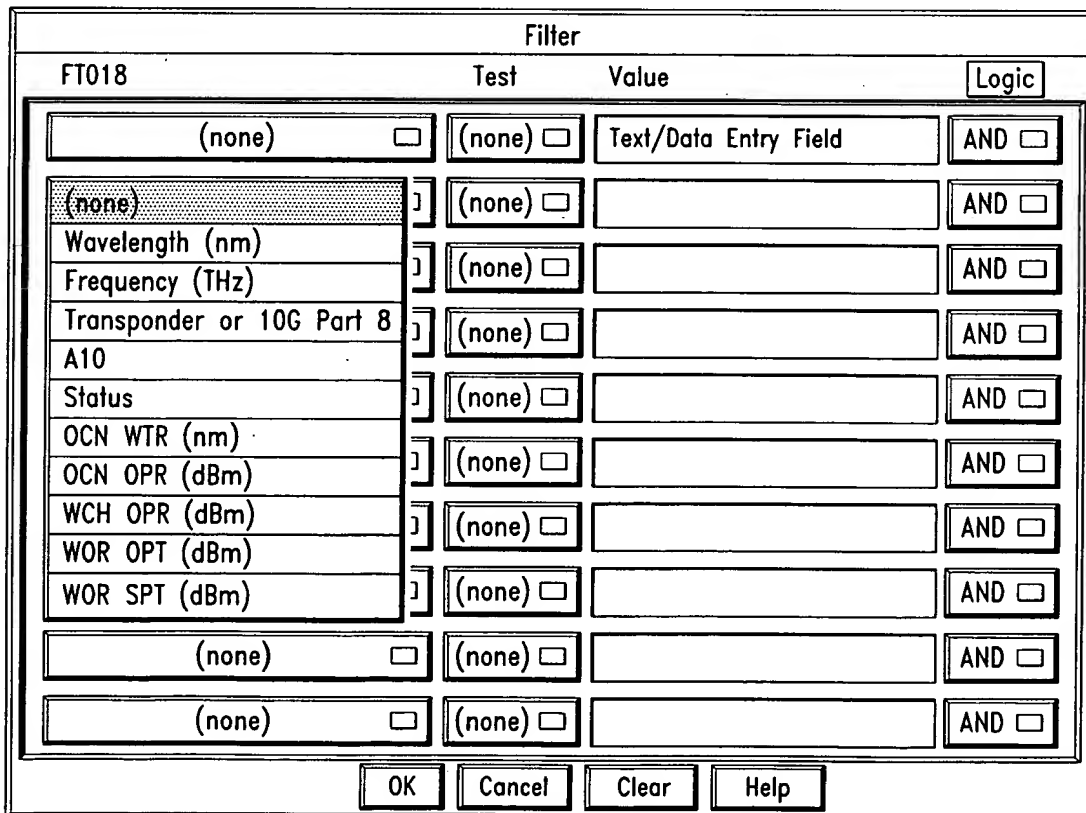


FIG. 5

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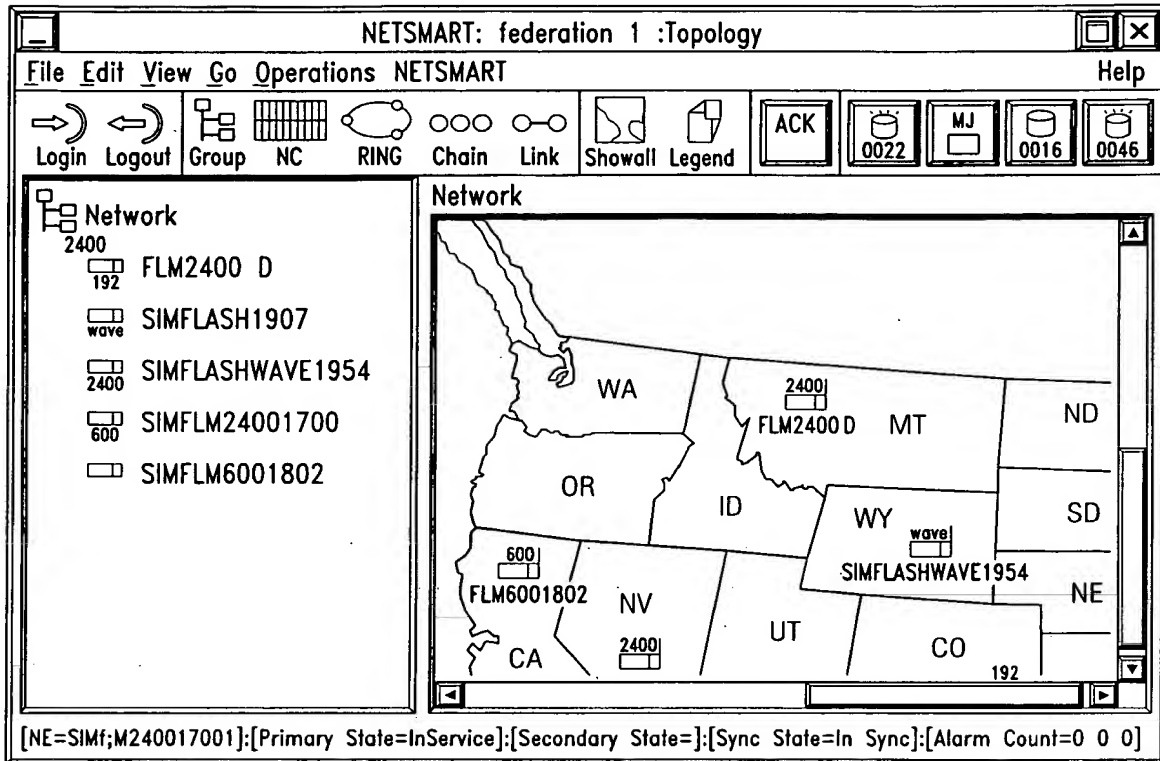


FIG. 6

The screenshot shows a "Search NE" dialog box. It has a "Search NE" text field and a "Search" button. Below the search field is a checkbox for "Case sensitive" and a "Starts with" dropdown menu. A list box titled "NE List" contains the following items: FLM150-OSI1, FLM150-OSI3, and FLM600-OSI1. At the bottom are "OK", "Cancel", and "Help" buttons.

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FIG. 7

Add Link

Group 1 :

NE 1 :

Group 2 :

NE 2 :

SIM FLASHWAVE 1951

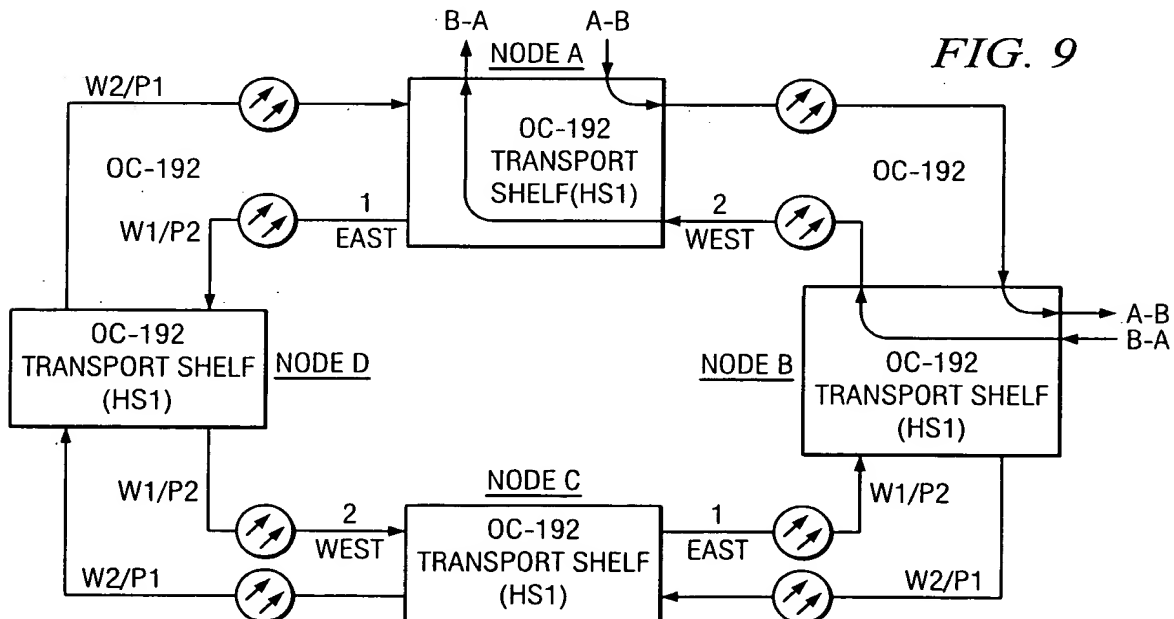
!

OCN	OS1-OCN-1	<input type="button" value="Rx"/>
OCN	OS1-OCN-11	<input type="button" value="Tx"/> <input type="button" value="Rx"/>
OCN	OS1-OCN-14	<input type="button" value="Tx"/> <input type="button" value="Rx"/>
OCN	OS1-OCN-15	<input type="button" value="Tx"/> <input type="button" value="Rx"/>
OCN	OS1-OCN-16	<input type="button" value="Tx"/> <input type="button" value="Rx"/>
OCN	OS1-OCN-2	<input type="button" value="Tx"/> <input type="button" value="Rx"/>

SIM FLASHWAVE 1957

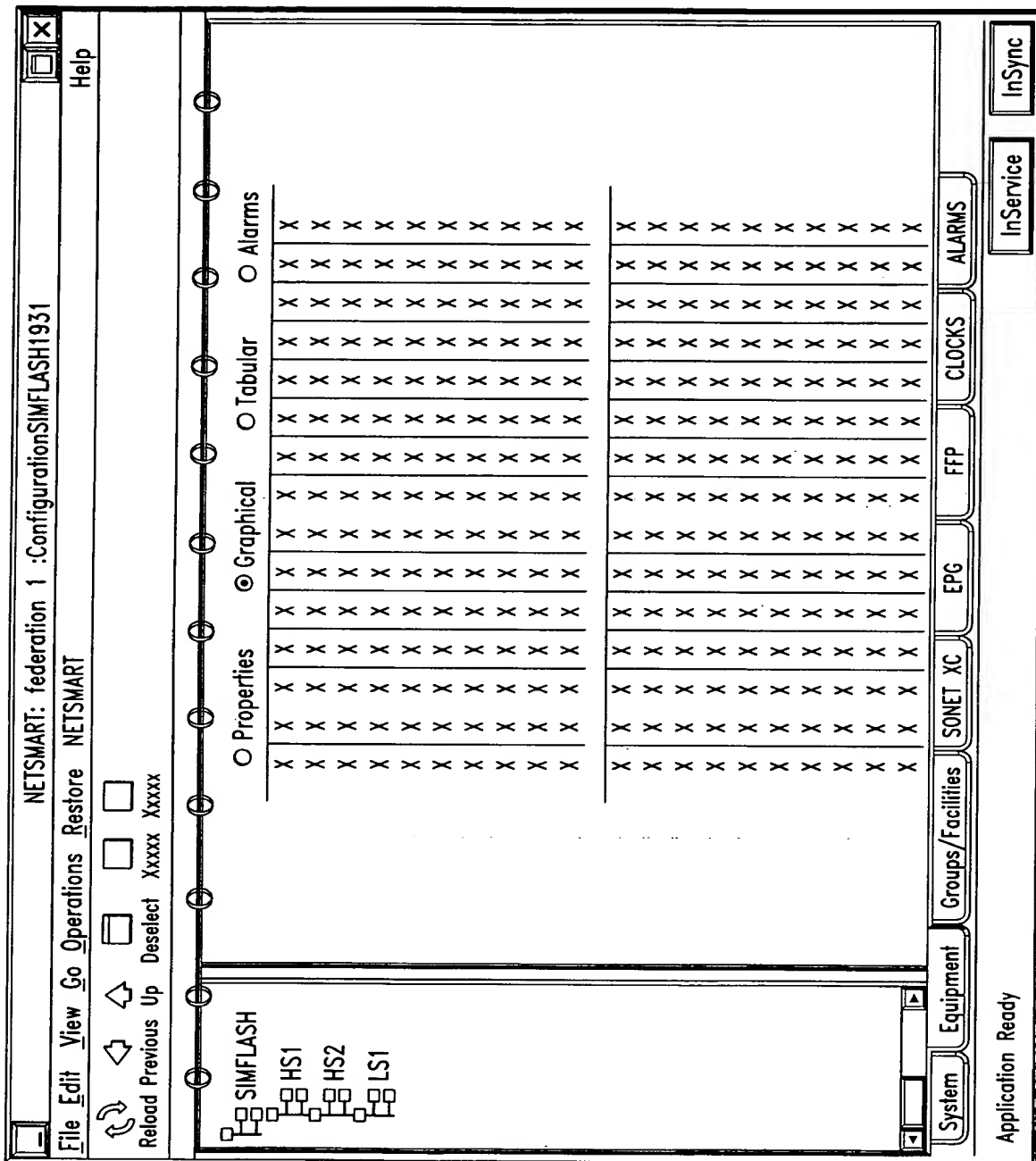
!

<input type="button" value="Rx"/>	OS1-OCN-1	OCN
<input type="button" value="Tx"/> <input type="button" value="Rx"/>	OS1-OCN-11	OCN
<input type="button" value="Rx"/> <input type="button" value="Tx"/>	OS1-OCN-14	OCN
<input type="button" value="Rx"/> <input type="button" value="Tx"/>	OS1-OCN-15	OCN
<input type="button" value="Rx"/> <input type="button" value="Tx"/>	OS1-OCN-16	OCN
<input type="button" value="Rx"/> <input type="button" value="Tx"/>	OS1-OCN-2	OCN



[illegible]

FIG. 8



**FIG. 10**

NETSMART: Configuration:FLM600 OS

File Edit View NE System Operations NETSMART

Reload Previous Up Xxxxxx Print

Help

MP6A

General Information

Access Name (AID) = MP6A

Entity Type = MPSA-ADL

Properties

Alarms

Attributes

Name	Value
CLEI	SNPQA7B5AA
DOM	94.03
VENDOR D	FC9616MPD1
VENDOR REY	01
primaryState	13
secondaryState	

System

Equipment

Groups/Facilities

SONET XC

EPG

FFP

Clocks

Alarms

InService

InSync

Application Ready

Name

FLM600-OS 1

MAINSHELF

PW6A-1

PW6A-2

AW6A

8V6A

MP6A

OSA

TCA-P

TCA-W

MC6A-3-P

MC6A-3-W

MC6A-4-P

MC6A-4-W

MC6A-5-P

FIG. 11



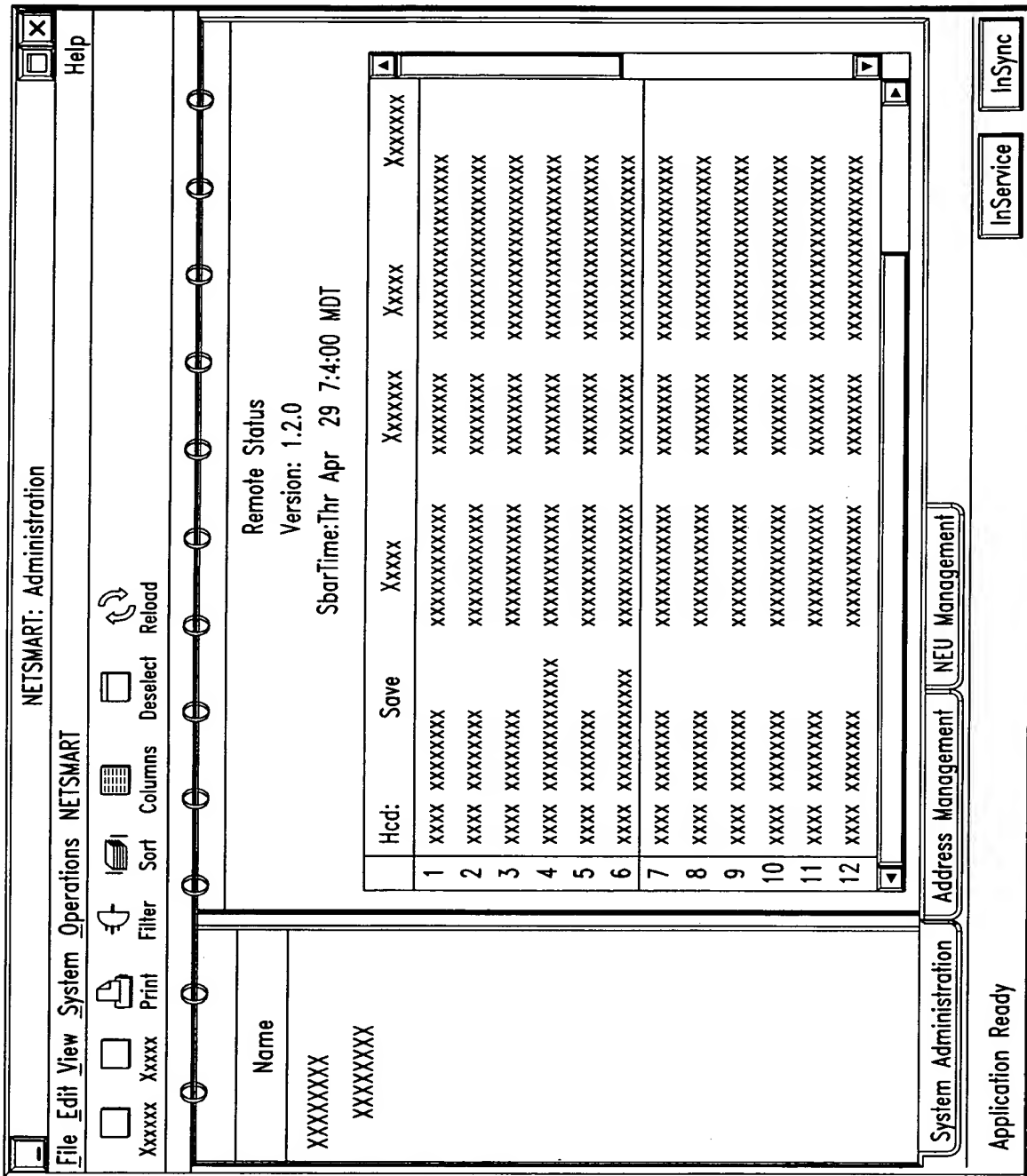


FIG. 12

**Inventor(s): Atul MISHRA, et al.**  
**Docket No.: 064731.0203**

REPLACEMENT  
SHEET

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NETSMART: Administration		Help	
<div style="display: flex; justify-content: space-between; align-items: center;"> <div> <div style="display: flex; gap: 10px;"> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> </div> <div> <div style="display: flex; gap: 10px;"> <div>Xxxxx</div> <div>Xxxxx</div> <div>Xxxxx</div> <div>Xxxxx</div> <div>Xxxxx</div> <div>Xxxxx</div> <div>Xxxxx</div> <div>Xxxxx</div> </div> </div> </div> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;"> <div> <div style="display: flex; gap: 10px;"> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div> <div> <div style="display: flex; gap: 10px;"> <div>Print</div> <div>Filler</div> <div>Sort</div> <div>Columns</div> <div>Deselect</div> <div>Reload</div> </div> </div> </div> </div></div>			
Administrator - All			
ID	PROTOCOL	ORIGINATOR	ADDRESS
1	SIHFxxxxxx	xxx	xxxxxxxxxxxxxxxxxxxxxxxx
2	SIHFxxxxxx	xxx	xxxxxxxxxxxxxxxxxxxxxxxx
3	SIHFxxxxxx	xxx	xxxxxxxxxxxxxxxxxxxxxxxx
4	SIHFxxxxxx	xxx	xxxxxxxxxxxxxxxxxxxxxxxx
5	SIHFxxxxxx	xxx	xxxxxxxxxxxxxxxxxxxxxxxx
6	SIHFxxxxxx	xxx	xxxxxxxxxxxxxxxxxxxxxxxx
7	SIHFxxxxxx	xxx	xxxxxxxxxxxxxxxxxxxxxxxx
8	SIHFxxxxxx	xxx	xxxxxxxxxxxxxxxxxxxxxxxx
9	SIHFxxxxxx	xxx	xxxxxxxxxxxxxxxxxxxxxxxx
10	SIHFxxxxxx	xxx	xxxxxxxxxxxxxxxxxxxxxxxx
11	SIHFxxxxxx	xxx	xxxxxxxxxxxxxxxxxxxxxxxx
12	SIHFxxxxxx	xxx	xxxxxxxxxxxxxxxxxxxxxxxx
13	SIHFxxxxxx	xxx	xxxxxxxxxxxxxxxxxxxxxxxx
14	SIHFxxxxxx	xxx	xxxxxxxxxxxxxxxxxxxxxxxx
15	SIHFxxxxxx	xxx	xxxxxxxxxxxxxxxxxxxxxxxx

System Administration

Address Management

NEU Management

Application Ready

InService

InSync

**FIG. 13**

NETSMART: federation 1: Administration
Help

File Edit View System Operations NETSMART

Xxxxxx Xxxxx Xxxxxx Xxxxx Xxxxxx Xxxxx Xxxxxx Xxxxx

Print Filter Sort Columns Deselect Reload

Address List - All

#	TD	PROTOCOL	Originator	ADDRESS
1	SIMFLASH61893	OSI	TARP	XXXXXXXXXXXXXXXXXXXX
2	SIMFLASH61894	OSI	TARP	XXXXXXXXXXXXXXXXXXXX
3	SIMFLASH61893	OSI	TARP	XXXXXXXXXXXXXXXXXXXX
4	SIMFLASH61893	OSI	TARP	XXXXXXXXXXXXXXXXXXXX
5	SIMFLASH61893	OSI	TARP	XXXXXXXXXXXXXXXXXXXX
6	SIMFLASH61893	OSI	TARP	XXXXXXXXXXXXXXXXXXXX
7	SIMFLASH1907	OSI	TARP	XXXXXXXXXXXXXXXXXXXX
8	SIMFLASH100	OSI	TARP	XXXXXXXXXXXXXXXXXXXX
9	SIMFLASH190	OSI	TARP	XXXXXXXXXXXXXXXXXXXX
10	SIMFLASH61893	OSI	TARP	XXXXXXXXXXXXXXXXXXXX
11	SIMFLASH1904	OSI	TARP	XXXXXXXXXXXXXXXXXXXX
12	SIMFLASH1903	OSI	TARP	XXXXXXXXXXXXXXXXXXXX
13	SIMFLASH100	OSI	TARP	XXXXXXXXXXXXXXXXXXXX
14	SIMFLASH190	OSI	TARP	XXXXXXXXXXXXXXXXXXXX
15	SIMFLASH001724	OSI	TARP	XXXXXXXXXXXXXXXXXXXX

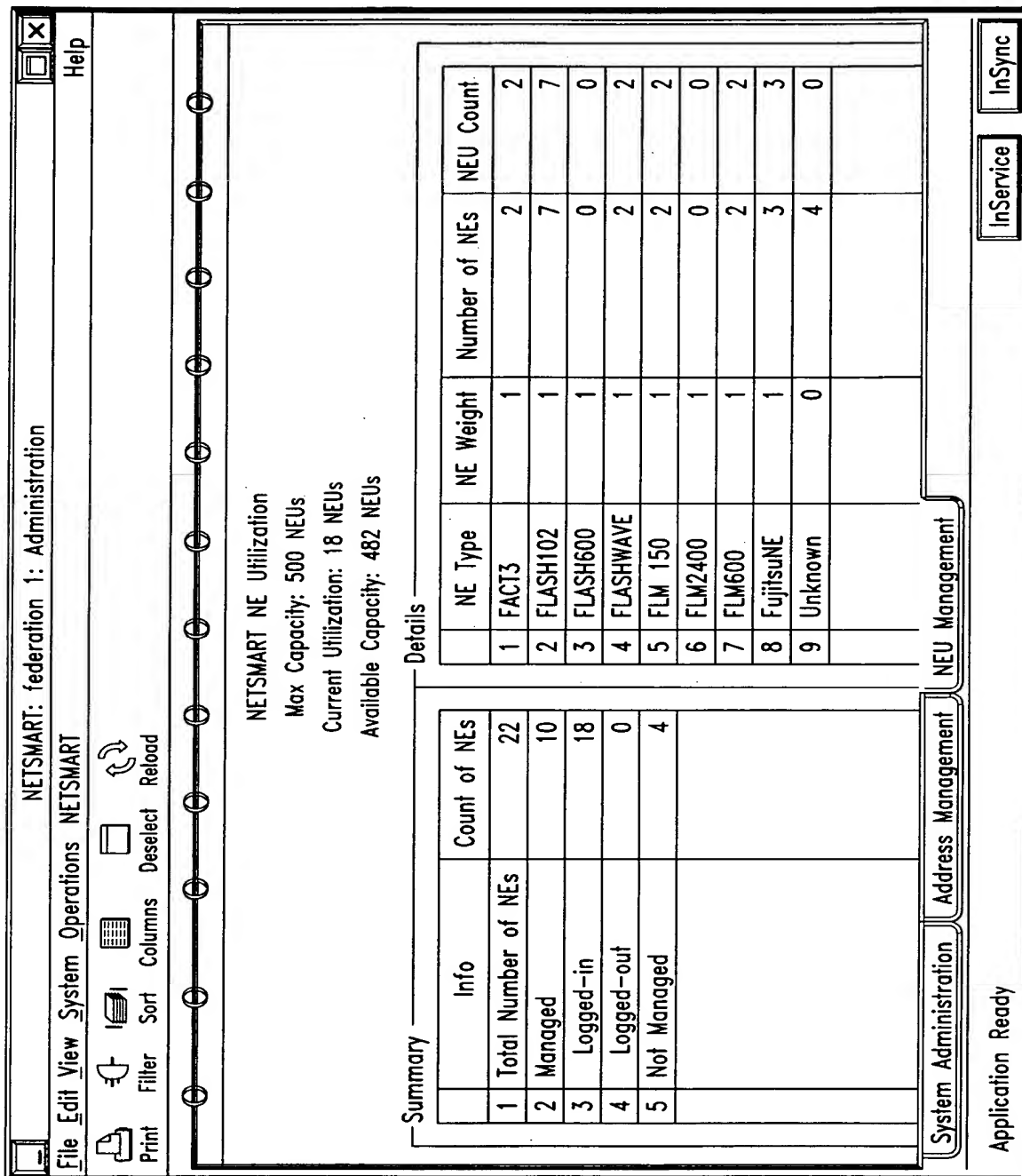
System Administration

Address Management

NEU Management

InService
InSync

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**FIG. 15**

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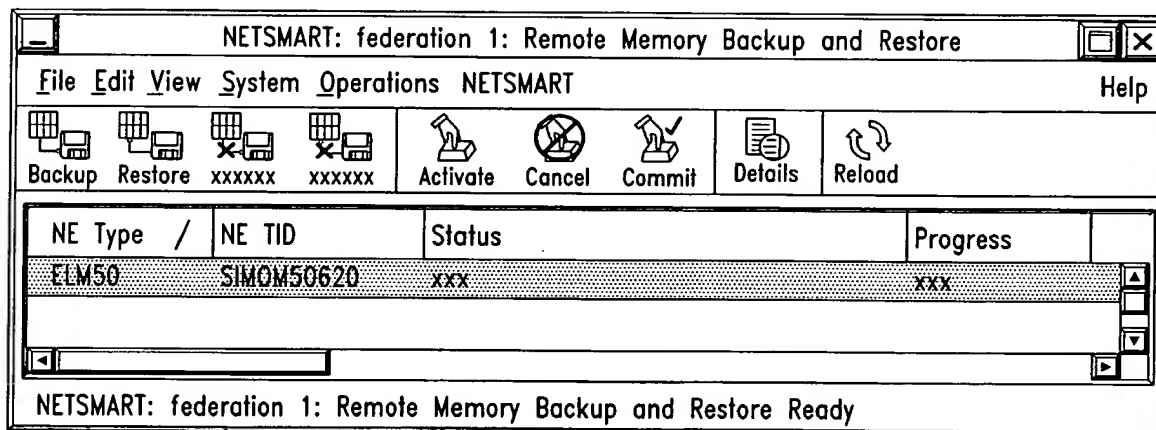
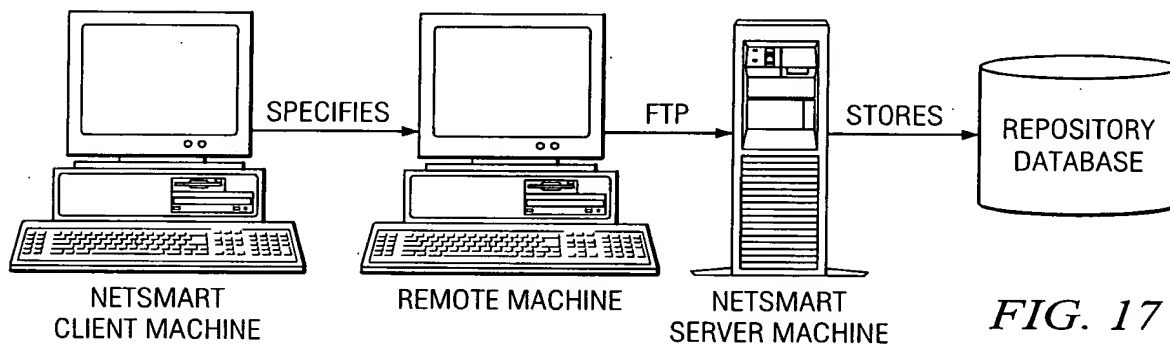
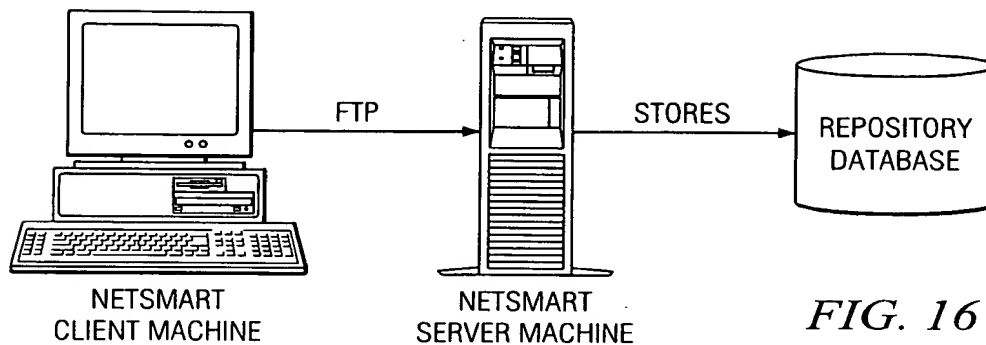


FIG. 18

[illegible]

The screenshot shows the NETSMART Configuration window for Federation 1. The main area displays four rows of configuration parameters:

- Xxxxxx**: A single box containing "Xxxxxx".
- Xxxxxx**: A row of six boxes, each containing "x.xx". A dashed line connects the first two boxes.
- Xxxxxx**: A single box containing "Xxxxxx".
- Xxxxxx**: A row of two boxes, the first containing "+1" and the second containing "+2".

The bottom status bar indicates "Application Ready". The right sidebar contains navigation buttons: System, Equipment, Groups/Facilities, Interface Type, Sonet XC, Fast Lane XC, DS0 XC, EGP, FFP, Alarms, Clocks, InService, and InSync.

FIG. 20

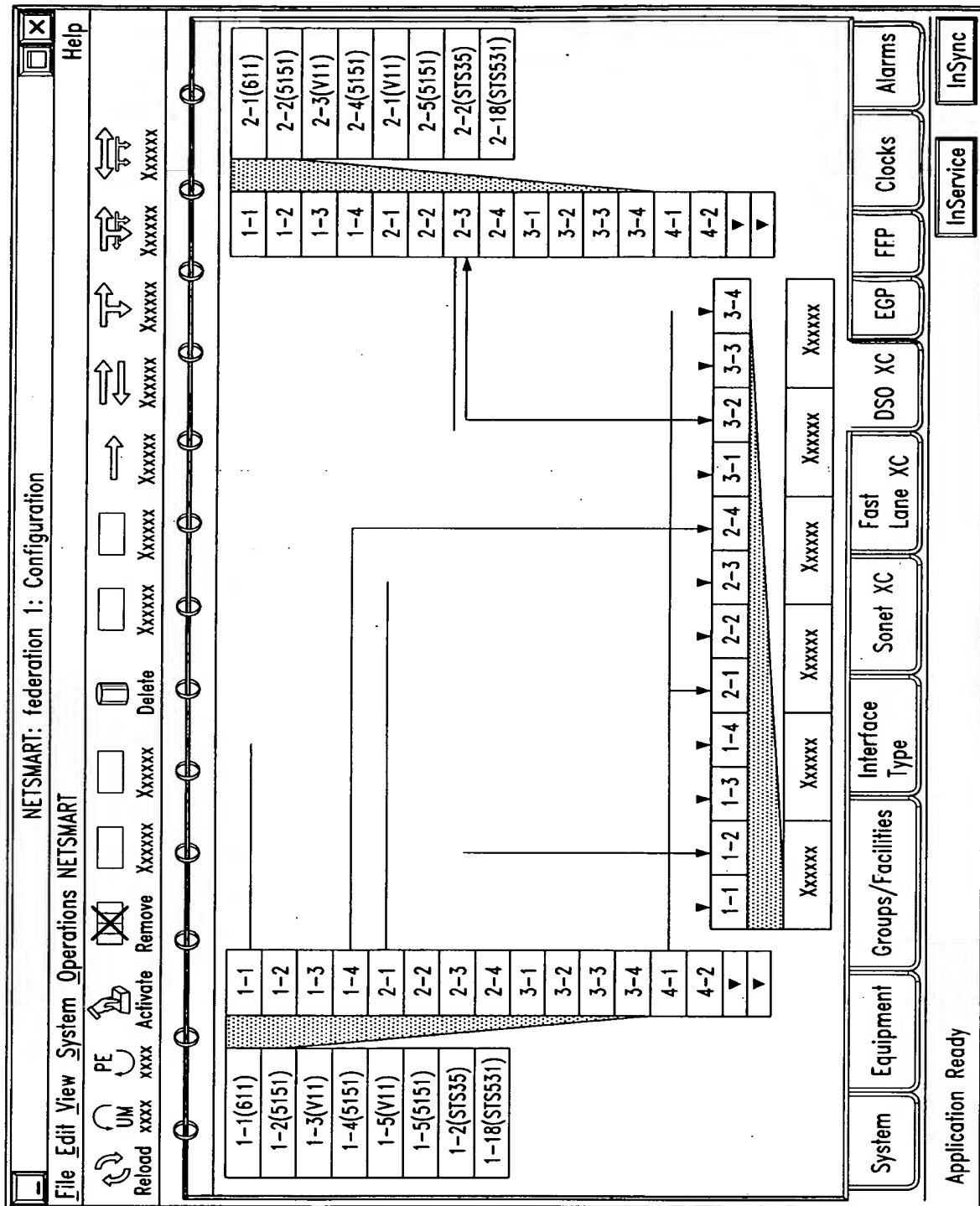


FIG. 21



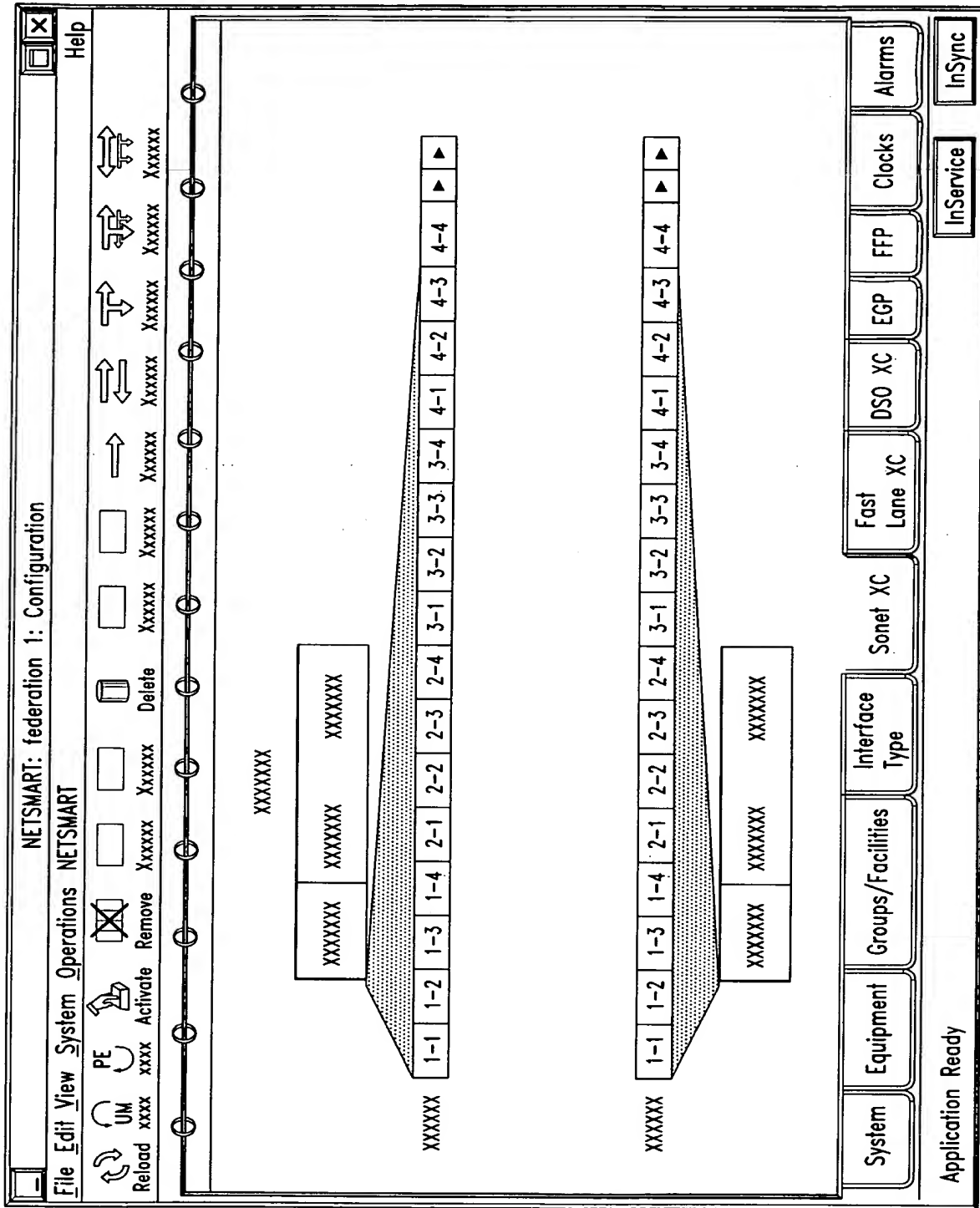


FIG. 22

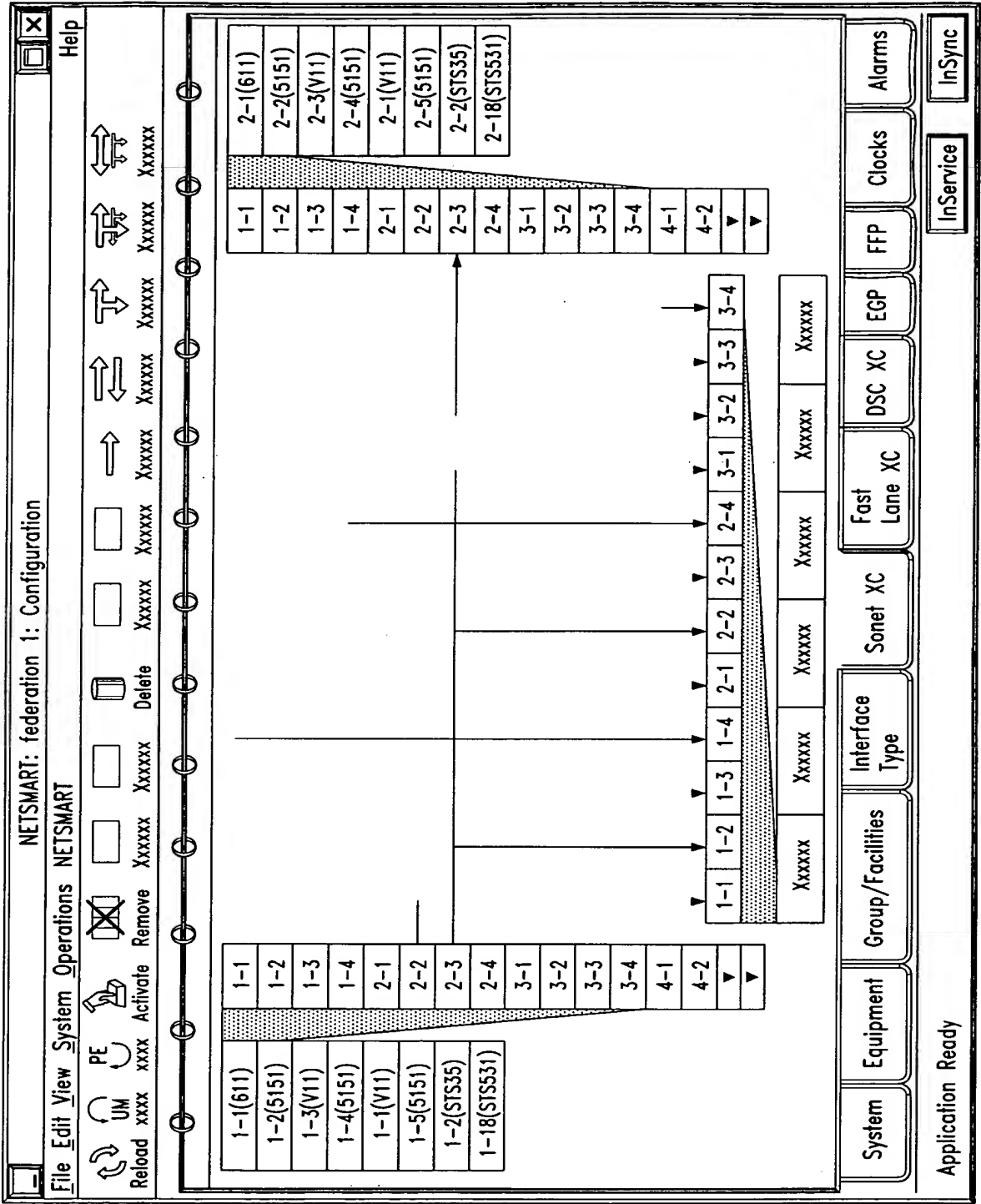








FIG. 23

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FIG. 24

Crossconnect Report							
							
Print	Filter	Sort	Columns	Deselect	Reload		
	From	To	Rate	Redline	Bridge	Crossconnect Name	Crossconnect Type
1	2-3-2-4	1-3-2-4	VT1	No			1 WAY
2	1-3-1-1	2-3-1-1	VT1	No			1 WAY
3	1-3-1-3	2-3-1-3	VT1	No			1 WAY
4	1-0-2-4	2-0-2-4	VT1	No			1 WAY
5	2-3-1-1	1-3-1-1	VT1	No			1 WAY
6	2-3-1-3	1-3-1-3	VT1	No			1 WAY
7	1-2	2-2	STS1	No			1 WAY
8	1-2	1-2	STS1	No			1 WAY
Close				Help			

[illegible]

X

Managing Facilities

Close

Xxxxx

Delete

Reload

Rate: OCN

Shelf: OS1

Existing Facilities
OS1-OCN-1
OS1-OCN-2
OS1-OCN-3
OS1-OCN-5
OS1-OCN-6
OS1-OCN-8
OS1-OCN-9
OS1-OCN-11
OS1-OCN-14
OS1-OCN-15
OS1-OCN-16

Non-existing Facilities
OS1-OCN-4
OS1-OCN-7
OS1-OCN-10
OS1-OCN-12
OS1-OCN-13
OS1-OCN-17
OS1-OCN-18
OS1-OCN-19
OS1-OCN-22
OS1-OCN-21
OS1-OCN-22

Access Name (AID) - OS1-OCN-1  
 Entity Type - OCN

Name	Value
OPTADJ	+0.0
RATE	10G
primaryState	IS-NR
secondaryState	

Attributes

FIG. 26

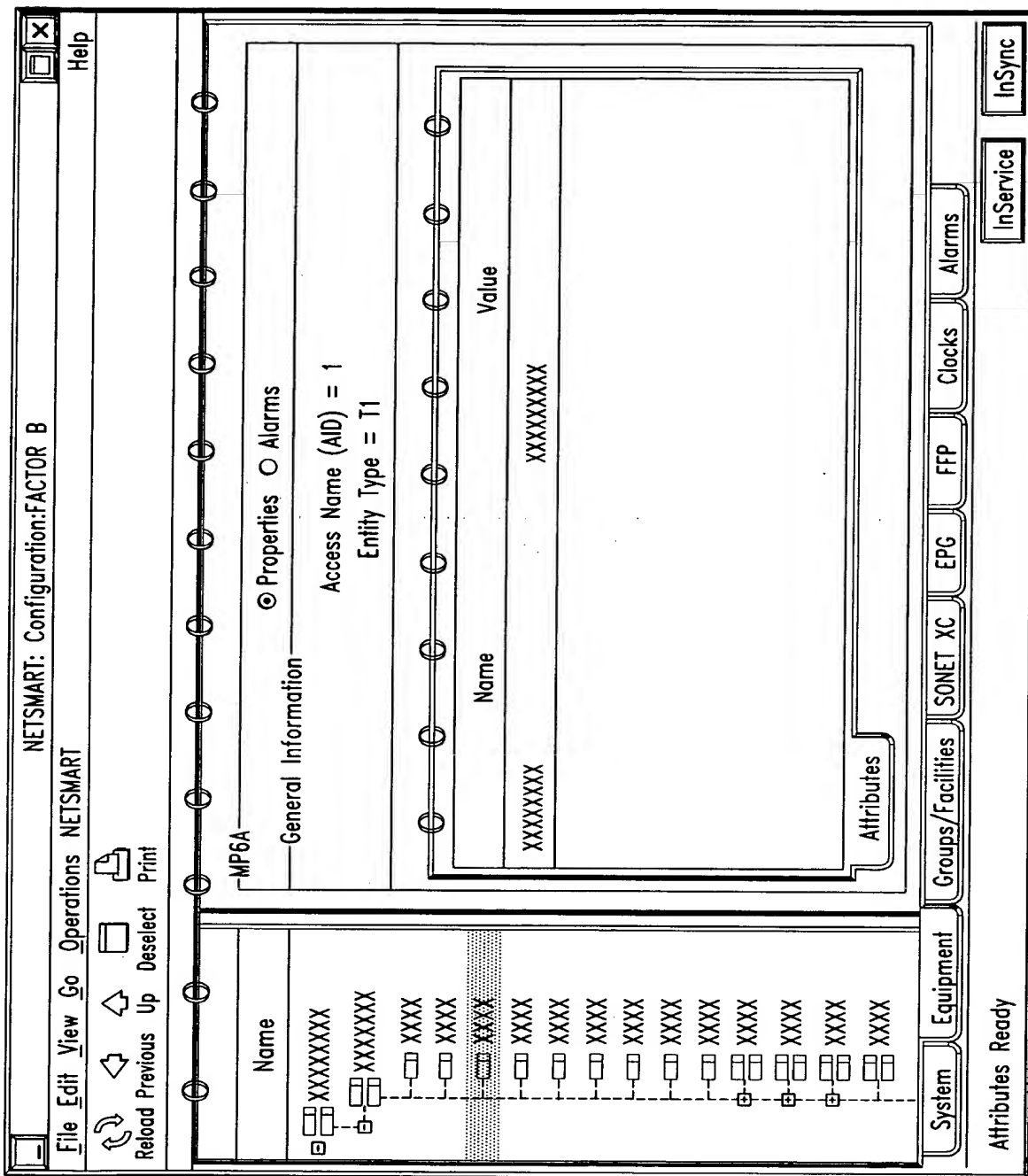


FIG. 27

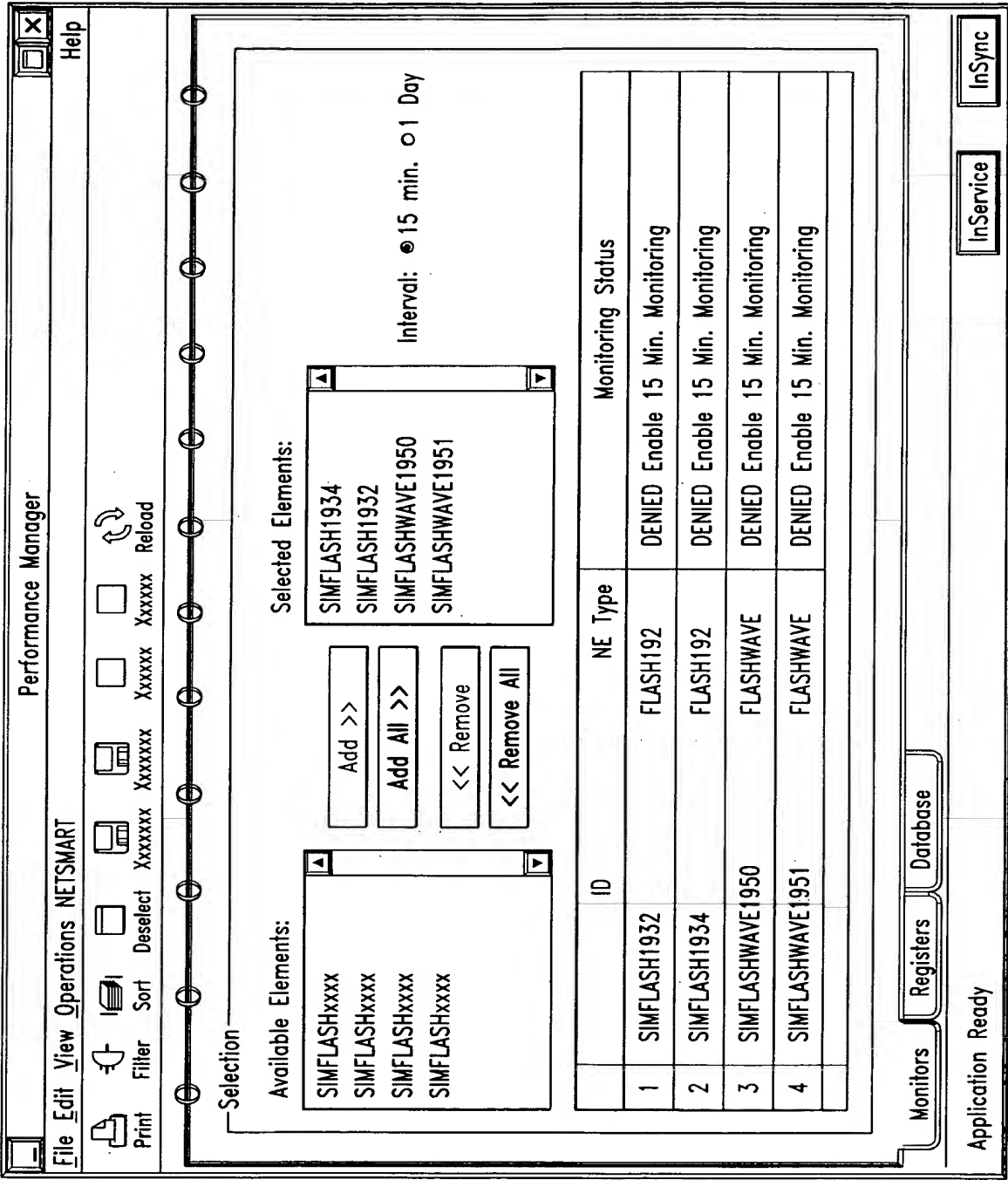


FIG. 28

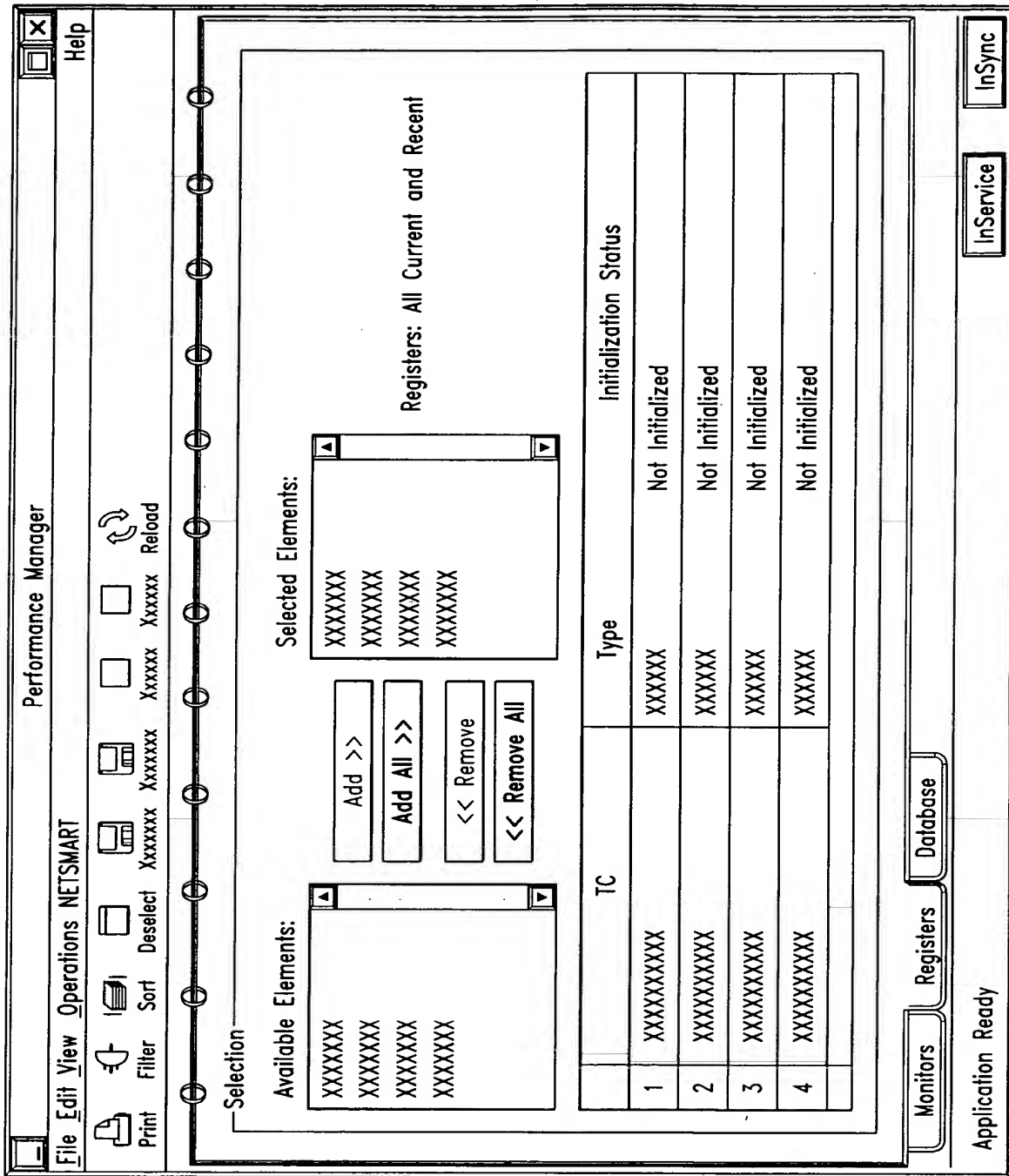


FIG. 29



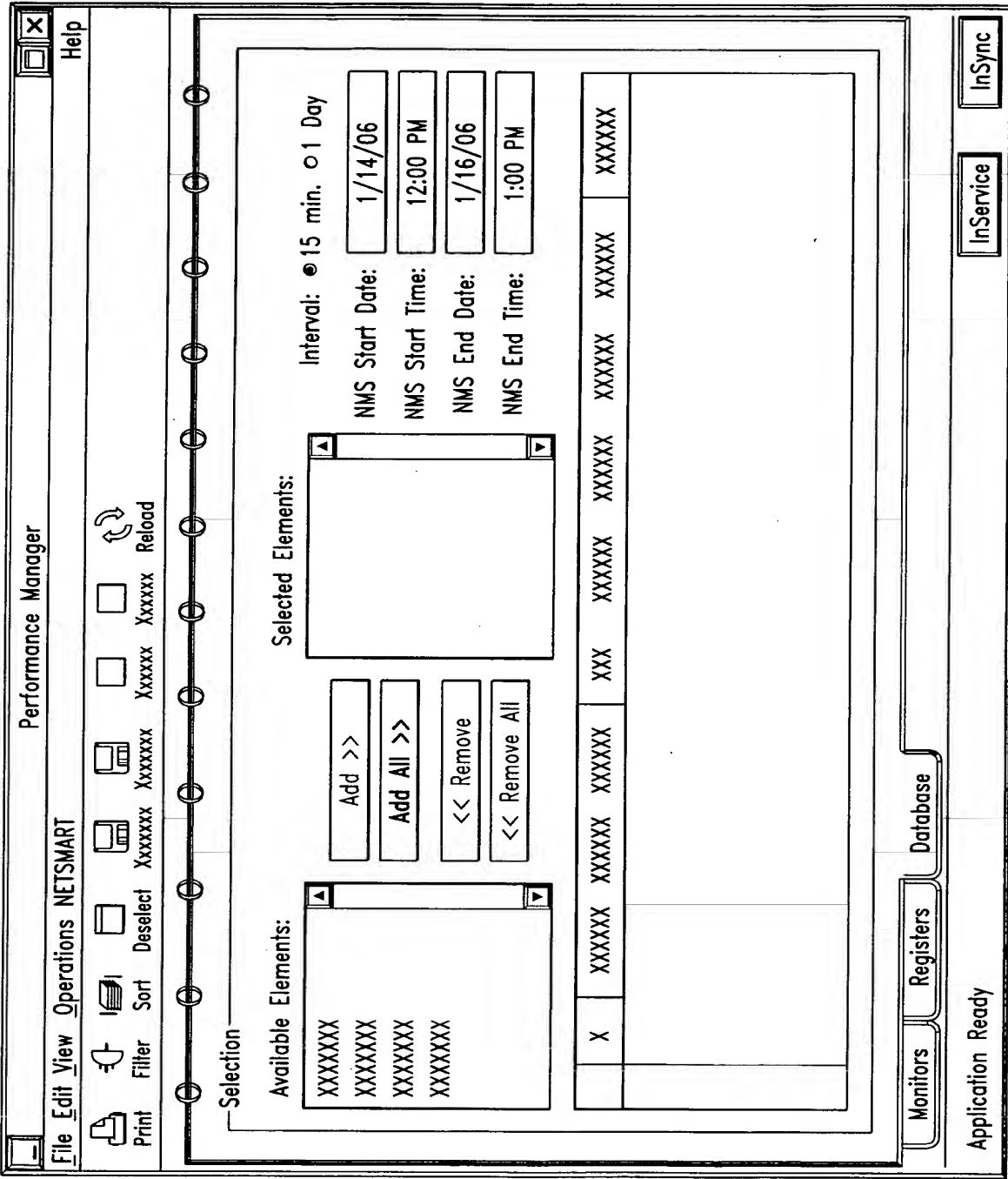


FIG. 30

Close
Print
Filter
Sort
Deselect
Xxxxxx
Xxxxxx
Xxxxxx
Reload

Available Equipment:

Add >>

Add All >>

<< Remove

<< Remove All

Selected Equipment:

	NvS Time	NE Time	A D TYPE	AID	Register	Value	Range	Threshold
1	Fri Feb 11 2000 14:58:35 EST	Fri Feb 11 2000 14:58:35 PST	FQFT	H51+72H-2	IRCH	1.0	1.2-1.8	1.3
2	Fri Feb 11 2000 14:58:35 EST	Fri Feb 11 2000 14:58:35 PST	FQFT	H51+72H-2	IPTN	1.0	0.2-0.8	0.3

Monitors
Registers
Databases

Application Ready
InService
InSync

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Close

Print

Filter

Sort

Deselect

Xxxxxx

Xxxxxx

Xxxxxx

Reload

HS1 2(OC192)

HS1-HT2H-2

Selection

Available Facilities:

Add >>

Add All >>

<< Remove

<< Remove All

Selected Facilities:

XXXXXXXXXXXX

Location ☒ NEND ☐ FEND ☐ NEND&FEND

Direction ☒ Receive ☐ N/A

Interval: ☒ 15 min. ☐ 1 Day

Start Index:

Final Index:

NMS Time	NE Time	AID TYPE	AID Register	Value	Range	Threshold	Default	Validity	Location	Direction

Monitors

Registers

Databases

Application Ready







InService

InSync

FIG. 32

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*FIG. 33*

Crossconnect Report							
							
Print	Filter	Sort	Columns	Deselect	Reload		
	From	To	Rate	Redline	Bridge	Crossconnect Name	Crossconnect Type
1	2-3-2-4	1-3-2-4	VT1	No			1 WAY
2	1-3-1-1	2-3-1-1	VT1	No			1 WAY
3	1-3-1-3	2-3-1-3	VT1	No			1 WAY
4	1-3-2-4	2-3-2-4	VT1	No			1 WAY
5	2-3-1-1	1-3-1-1	VT1	No			1 WAY
6	2-3-1-3	1-3-1-3	VT1	No			1 WAY
7	1-2	2-2	STS1	No			1 WAY
8	2-2	1-2	STS1	No			1 WAY
Close				Help			

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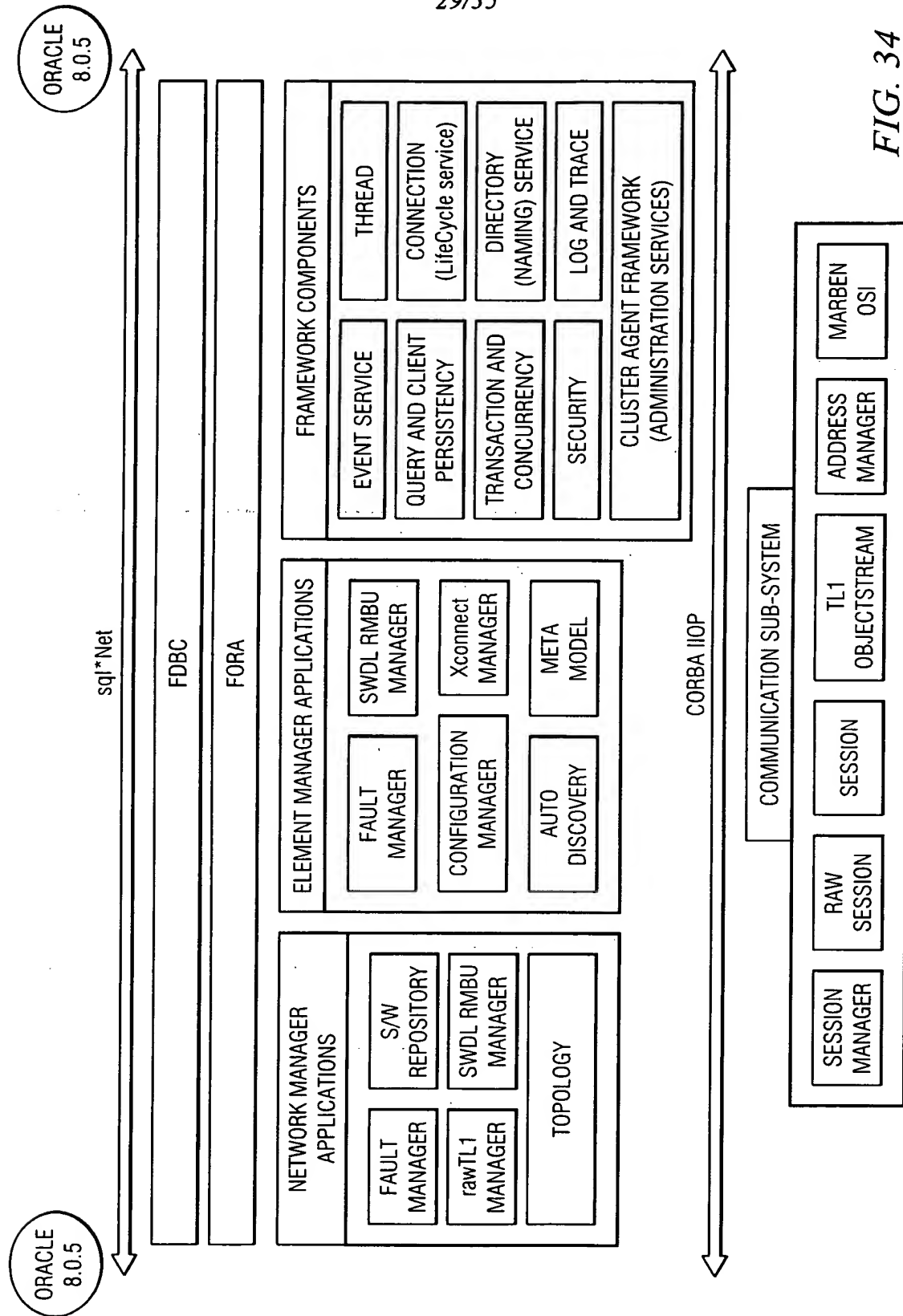


FIG. 34

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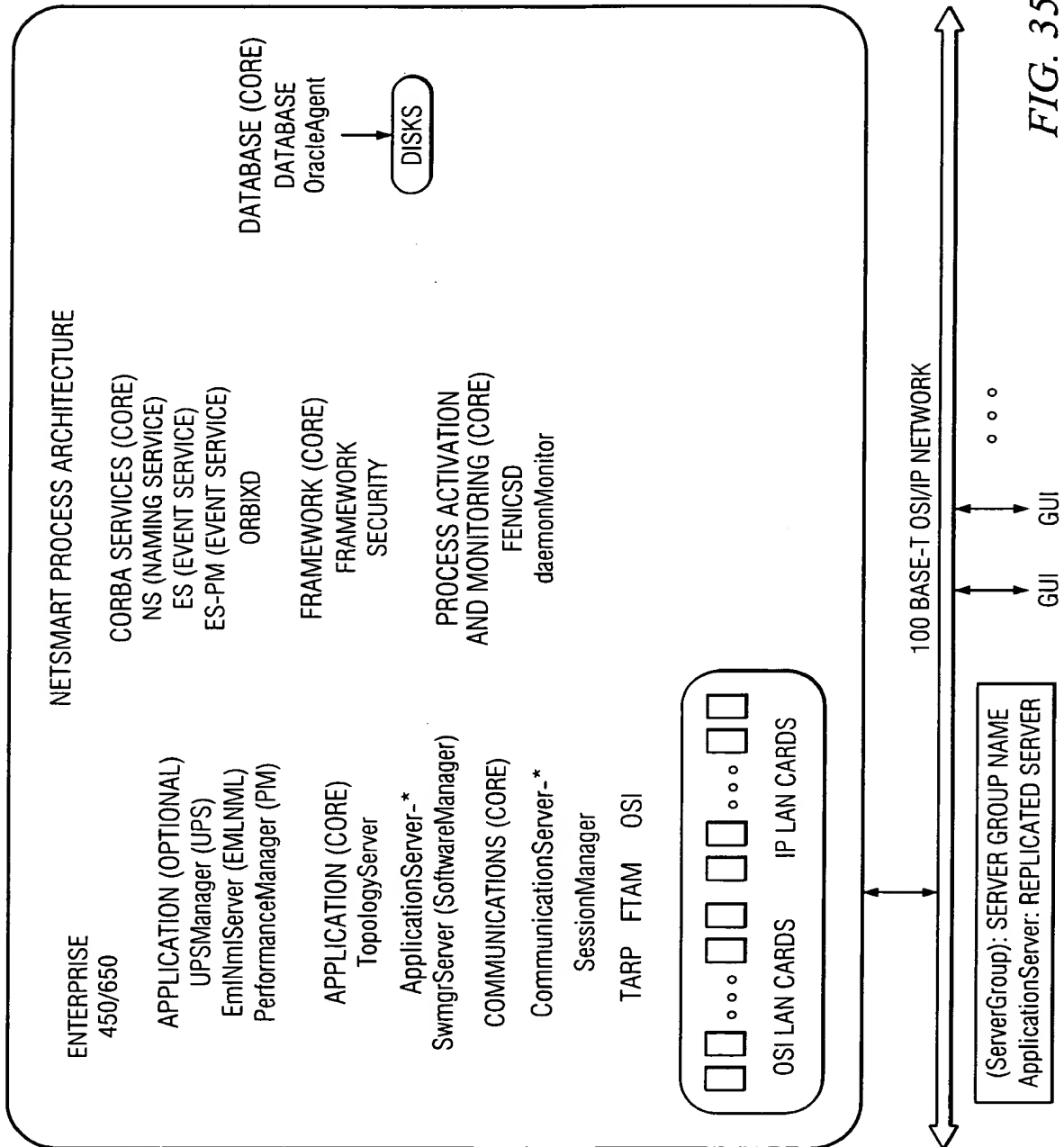


FIG. 35

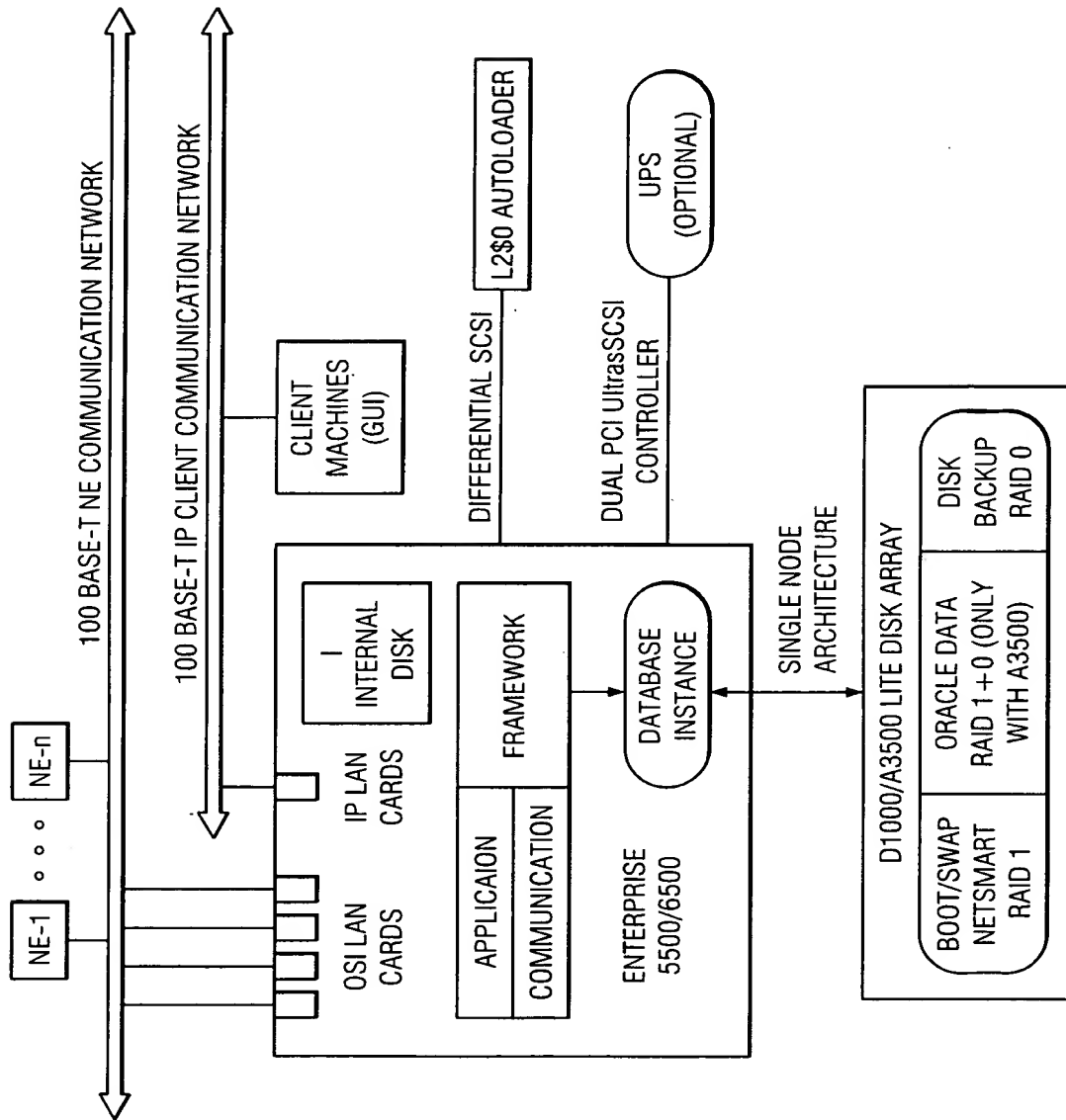
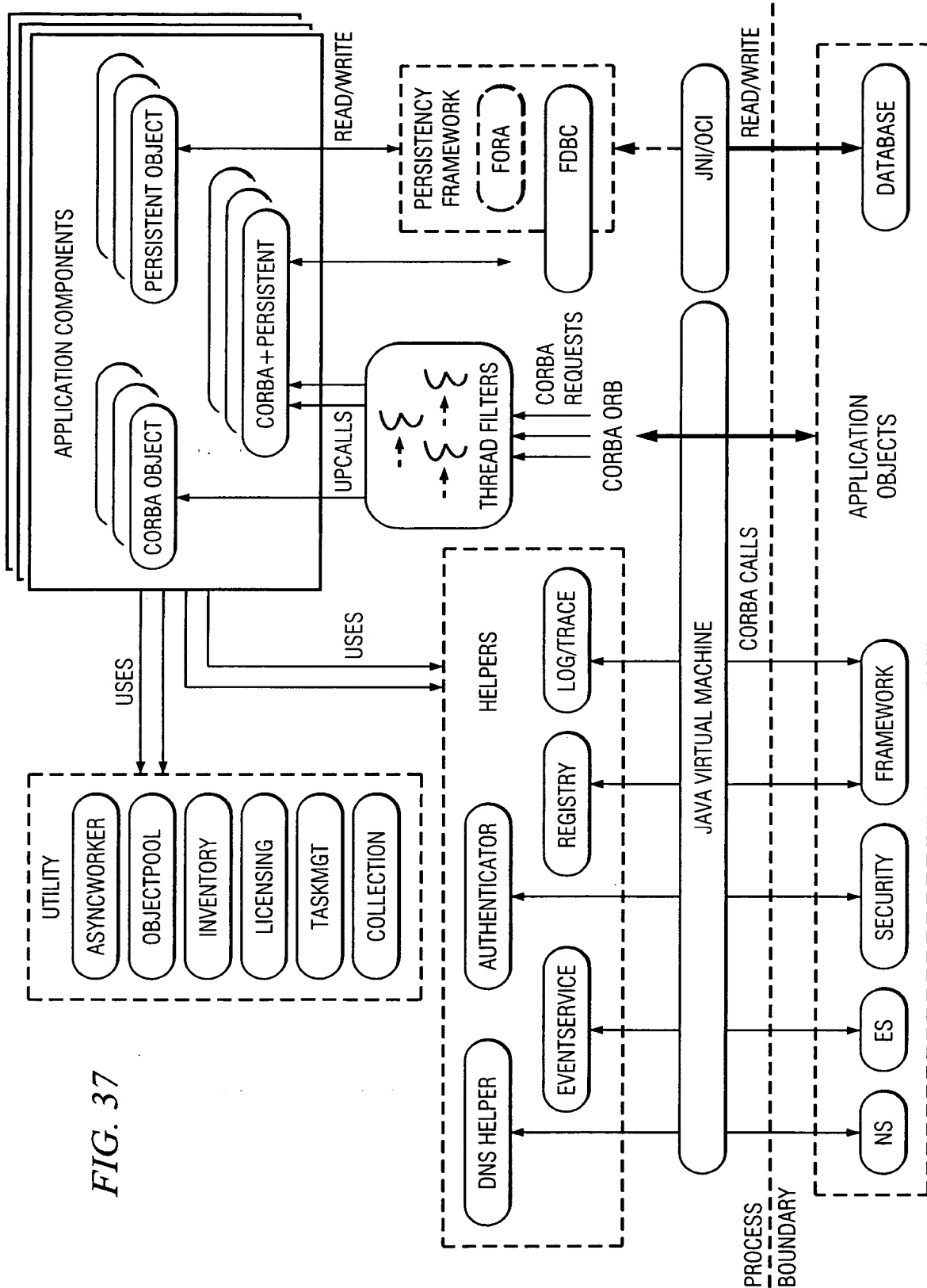


FIG. 36

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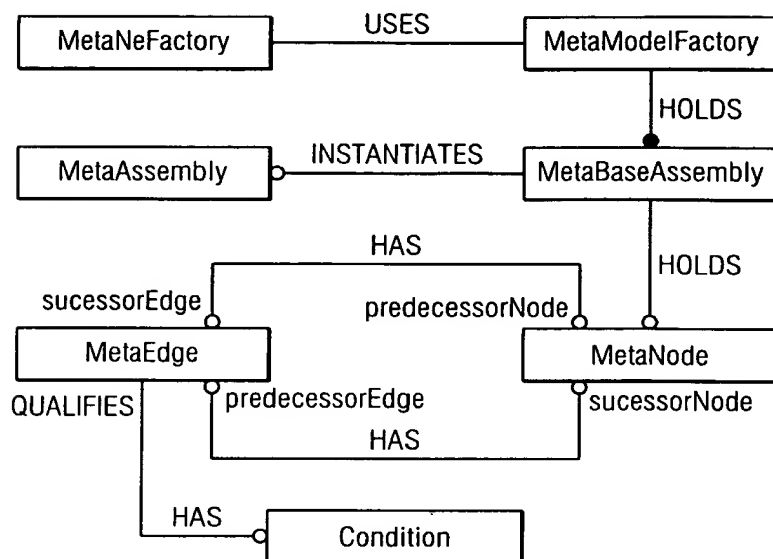


FIG. 38

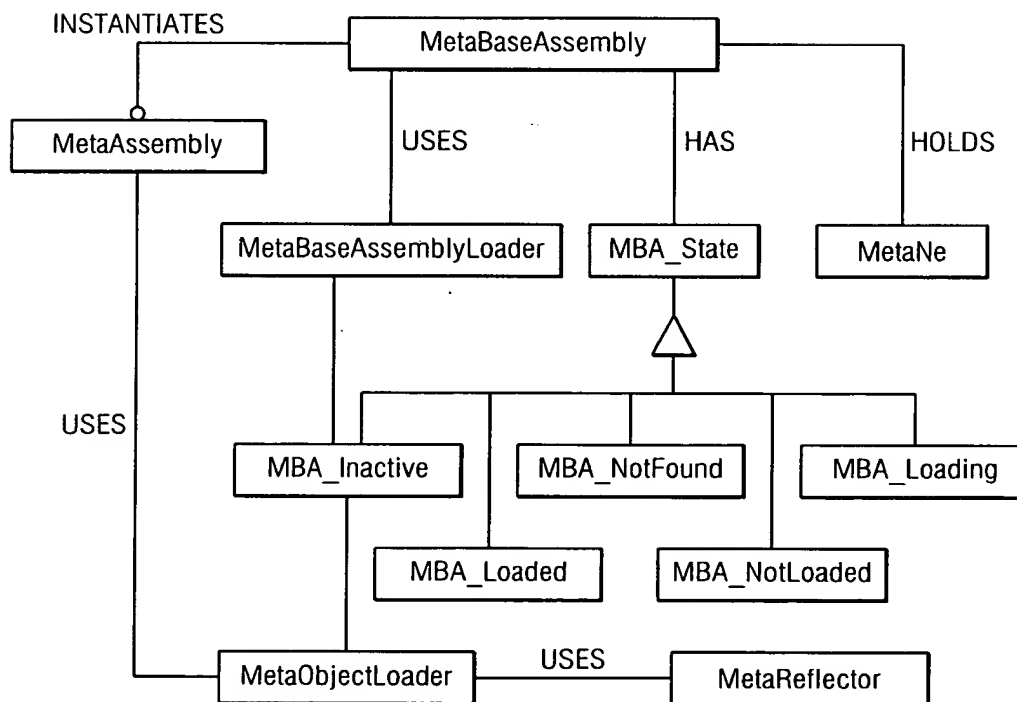


FIG. 39

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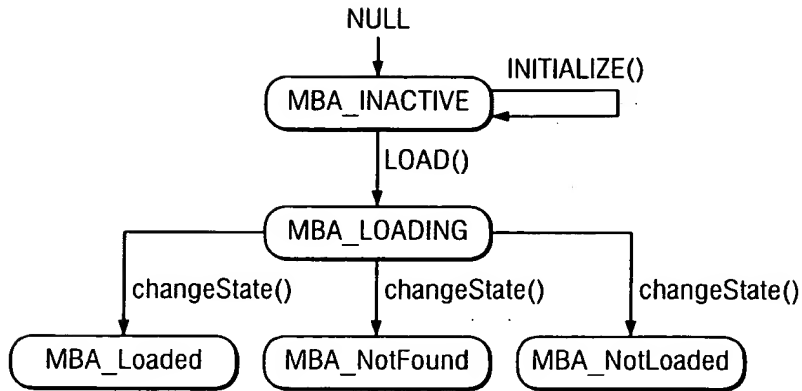


FIG. 40

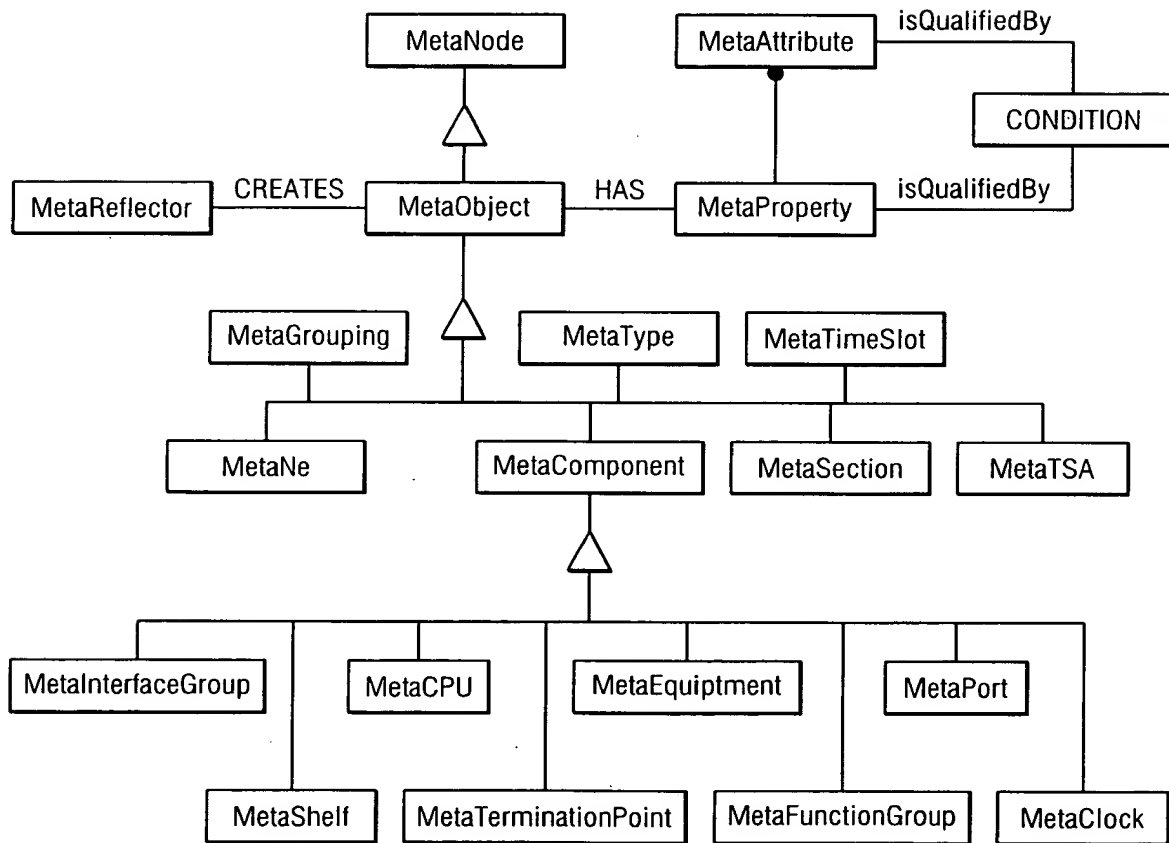


FIG. 41

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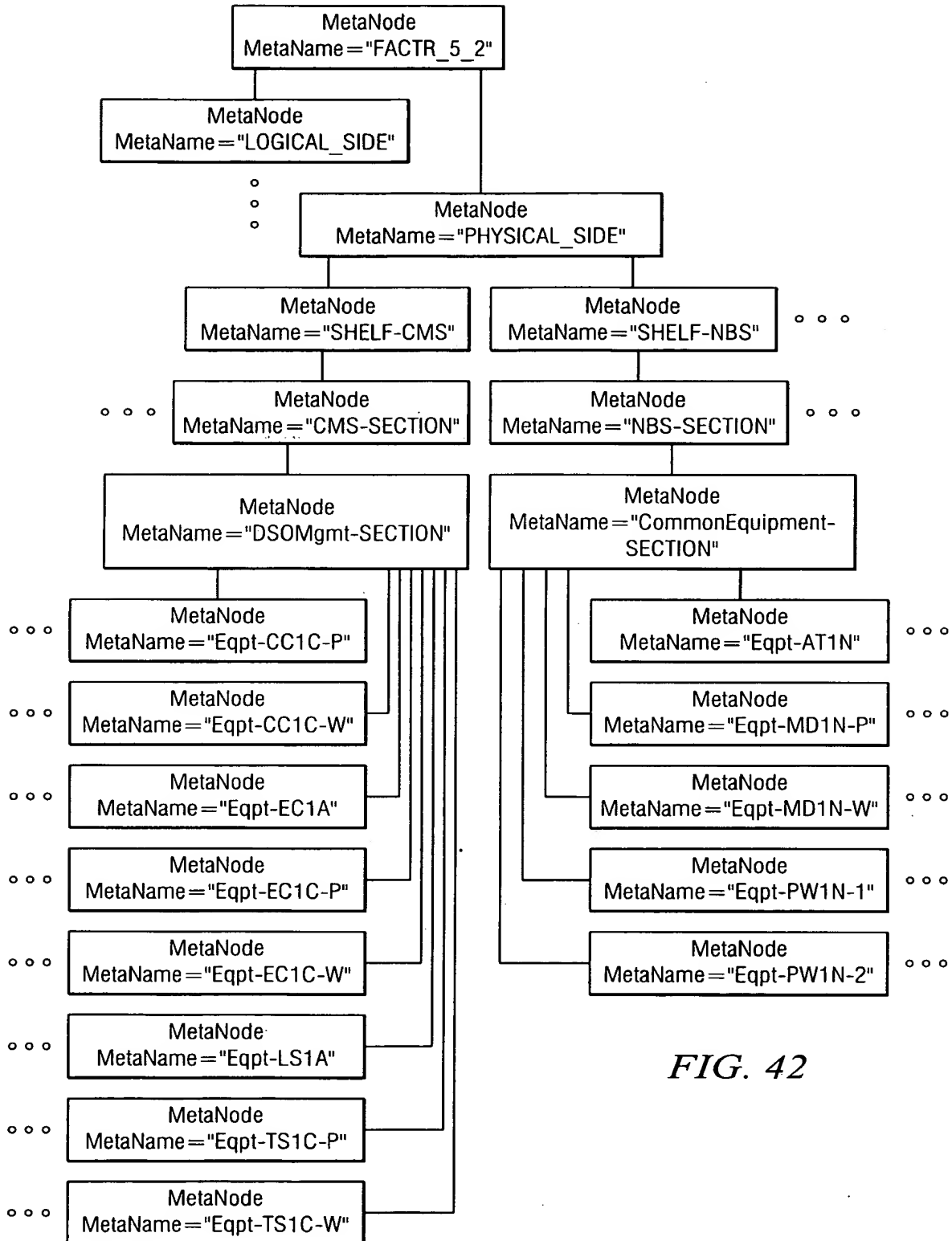


FIG. 42